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## **REMARKS**

This case has been carefully reviewed in light of the non-final Office Action dated March 22, 2007, wherein claims 1-4, 15, 16, 29 and 30 were rejected and claims 5-14, 17-28 and 31-38 were objected to. The drawings were objected to under 37 CFR 1.83(a), and the specification was objected because of various informalities.

Claims 5-14, 17-28 and 31-38 were objected to under 37 CFR 1.75(c) as being in improper form, claims 15-28 were rejected under 35 USC 112 as failing to comply with the written description requirement, claim 16 was rejected for lack of antecedent basis, claims 15-28 were rejected under 35 USC 101 as being directed to non-statutory matter, and claims 1-4, 15-16 and 29-30 were rejected under 35 USC 102(e) as being anticipated by US Patent No. 7,152,105, McClure et al (hereinafter "McClure"). New drawings were suggested to comply with 37 CFR 1.83 (a), and it was suggested that the Applicant review the specification in light of the complete list of content of the Specification provided by the Examiner.

Applicant thanks the Examiner for pointing out the various informalities and for providing the guidelines for the Specification. Applicant respectfully submits that all the objections, rejections and suggestions have been carefully reviewed.

The Specification has been edited and presented to comply with the requirements as suggested. The drawings have been provided as replacements sheets, and elements of the independent claims have been included as suggested. No new matter was added.

Claims 5-38 were amended to treat the objections and the rejections as mentioned above.

Claims 1-38 are pending. Reconsideration of the rejections in light of the following remarks is respectfully requested.

# **Drawings**

The Examiner objected to the drawings because the "a first data structure" and "a second data structure " are present in the claims and must be shown in the drawings. The Applicant thanks the Examiner for pointing out this informality, and respectfully submits that the drawings as required have been provided in the new or replacement sheets in compliance with the requirements of 37 CFR 1.121 (d).

Figures 2 and 3 have been inserted and are provided on "NEW SHEET", while figures previously numbered from Figure 2 to Figure 15 have been edited for renumbering of the figures

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and element numbers, and included in "REPLACEMENT SHEET". No new matter has been added.

#### **Specification**

The Examiner suggested that the specification be reviewed to comply with the list of content of specification, and is required on new application papers with 1.5 line spacing. In response, the Applicant reviewed the specification to comply with the list of contents as suggested and a substitute specification has been provided with 1.5 line spacing, under 37 CFR 1.125 (c).

#### **Objections**

Claims 5-14, 17-28 and 31-38 were objected to under 37 CFR 1.75(c) as being in improper form. Applicant thanks the Examiner for pointing out the informalities, and respectfully submits that the amended claims 5-14, 17-28 and 31-38 are now in compliance with the requirements of 37 CFR 1.75(c).

#### 35 U.S.C. § 112

Claims 15-28 were rejected under 35 USC 112 as failing to comply with the written description requirement, and claim 16 was rejected for lack of antecedent basis. Claims 15 was amended to recite a "computer readable media" as opposed to a "media". Use of computer readable media is apparent by the context of the invention.

Further, claim 16 was amended to correct the antecedent basis.

Applicant respectfully submits that the claims 15-28 now comply with the requirements of 35 USC 112, and respectfully requests the removal of the said rejection.

## 35 U.S.C. § 101

Claims 15-28 were rejected under 35 USC 101 as being directed to non-statutory matter. Applicant has amended the claims to now recite "logic encoded in a program stored in a computer readable media", and respectfully submits that the claims 15-28 are now compliant with 35 USC 101.

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### 35 U.S.C. § 102(e)

#### **McClure**

Claims 1-4, 15-16 and 29-30 were rejected under 35 USC 102(e) as being anticipated by McClure. According to the Examiner, McClure teaches a system for real-time vulnerability assessment of a host/device. This ground of rejection is respectfully traversed because McClure does not teach all the elements of the claimed invention.

"Anticipation requires the presence in a single prior art reference disclosure each and every element of the claimed invention, arranged as in the claim." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). Therefore, anticipation cannot be found in a situation where the claimed elements are arranged differently in the prior art. Furthermore, it is error to "treat the claims as a mere catalog of separate parts, in disregard of the part-to-part relationships set forth in the claims . . . that give the claims their meanings." Id. at 486.

According to the Examiner, McClure teaches a system for real-time Vulnerability Assessment (VA) of a host/ device. The Examiner states that Figure 1, item 102; Figure 3, col. 6, line 59 to col. 8, line 8; and col. 13, line 10 to col. 15, line 40 of McClure disclose a host/device as disclosed in the Applicant's claims. Applicant respectfully disagrees and submits that the item 102, Figure 1 of McClure does not have an agent that has data structures to track the status of ports/interfaces, as presented in the Applicant's claims. Further, the Applicant respectfully submits that the present invention, in certain embodiments, attempts to impart a real-time aspect to Vulnerability Assessment. Applicant respectfully submits that Figure 3 of McClure does not disclose an agent that has data structures to store the status of ports/interfaces on the host/device, that enable tracking of the status of interfaces and ports on the interfaces of the host/device. Further, col. 6, line 59 to col. 8, line 8 may suggests that McClure tests to check if the target computer (host/device) is present on a network. However, McClure does not make any checks that are real-time in nature. Further, with respect to claim 29, for example, McClure does not disclose a method that tracks the status of interfaces and ports in real-time, as recited in the claims. Further, Applicant notes that the agent mentioned in McClure is not resident on the target host/device. Applicant notes that the agent as recited in the instant claims is resident on the target host/device, and, in according to certain embodiments, enables the real-time status tracking which is an important feature that the instant invention makes available. Further, the Applicant respectfully submits that the part-to-part relationships of the elements of the Applicant's claims impart a real-time character to the claim as a whole, and at least some of claim elements, which are distinct from any aspects discussed in McClure.

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Applicant respectfully submits that McClure does not disclose, at least, the Applicant's claim recitations of (emphasis added)

1. A system for real-time vulnerability assessment of a host/device, said system comprising:

an agent running on the host/device, said agent comprising:

a first data structure for storing the status of interfaces and ports on the interfaces of the host/device.

an executable agent module coupled to the first data structure to track the status of interfaces and ports on the interfaces of the host/device and to store the information, as entries in said first data structure.

said executable agent module to compare the entries to determine a change in the status of interfaces and/or of ports on the interfaces of the host/device,

a remote destination server, said destination server comprising,:

a second data structure for storing the status of interfaces and the ports on the interfaces of the host/device,

an executable server module coupled to the second data structure to receive the information communicated by the agent executable module of the agent on the host/device,

said executable server module to store the received information as entries in the second data structure wherein the entries indicate the state of each of the ports on each of the active interfaces of the host/device as received,

said executable server module to compare the entries in said data structures to determine the change in the status of interfaces and ports on the interfaces of the host/device, and

said executable server module to run vulnerability assessment tests on the host/device in the event of a change in the status of interface/ports.

29. A computer-implemented method for real-time vulnerability assessment of a host/device, said method comprising:

tracking in real-time the status of interfaces and ports on the host/device,

collecting and storing the status as entries in a data structure,

comparing the entries to determine any change in the status of interfaces and/or the status of ports on the interfaces of the host/device.

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communicating the changes to a remotely located destination server on the network,

storing said changes as entries in a data structure by the destination server wherein the entries indicate the state of each of the ports on each of the active interfaces of the host/device as reported,

comparing the entries by the destination server to determine if there is any change in the status of interfaces and ports on the interfaces of the host/device as reported to it, and

running vulnerability assessment tests on the host/device by the destination server and reporting the results.

Accordingly, McClure does not anticipate Claim 1 for at least the reasons presented above, and Applicant respectfully submits that Claim 1 is allowable under 35 USC 102(e). Claims 3, 15-16 and 29-30 are believed to be allowable under 35 USC 102(e) for similar reasons.

Claims 2, 4, 5-14, 17-28 and 31-38 depend directly or indirectly from independent claims 1, 3, 15, 16, 29 and 30, which are believed to be allowable for at least the reasons presented above. Accordingly, claims 2, 4, 5-14, 17-28 and 31-38 are believed to be allowable under 35 U.S.C. 102 (e).

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# CONCLUSION

In view of the foregoing, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicant at the telephone number below.

Respectfully submitted by,

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## **Enclosures: 04**

- Specification as filed originally. Annotated to illustrate changes. Excludes Claims and Abstract
- 2. Substitute Specification under 37 CFR 1.125(c). Excludes Claims and Abstract
- 3. Two (02) "NEW SHEETS"
- 4. Fourteen (14) "REPLACEMENT SHEETS"

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#### **DRAWINGS**

The drawings were objected to under 37 CFR 1.83(a) as not showing the features recited in the claims. It was further suggested by the Examiner that the Applicant submit corrected drawing sheets in compliance with 37 CFR 1.121(d). Applicant thanks the Examiner for the pointing out the informalities, and respectfully submits that the required changes have been made and provided. The following is the summary of the changes made to the drawings:

Figures 2 and 3 were introduced to capture elements recited in claims 29 and 1 respectively, as also indicated by the Examiner. Figures 2 and 3 are captured in "New Sheets".

Figures previously numbered from Figure 2 to Figure 15, are now renumbered as Figure 4 to Figure 17 respectively. The drawings were redrawn for neatness, and elements were renumbered to be consistent with the statutory requirements. Figures 4 to Figures 17 are provided in "Replacement Sheets"

Figure 1 has not been amended, as is preserved as original.

No new matter was added.